CARBOHYDRATE LOADING NUTRITIONAL **SUPPLEMENT**

Coconut Lime Flavor Powdered Drink Mix



Anesthesiologist Recommended

Anesthesiologist Society Guidelines recommend clear fluids be consumed up to 2 hours before elective surgery.



Highlights:

- Complex Carbohydrate Drink
- Clear Fluid
- Optimal Osmolarity •
- Follows ERAS® Guidelines •



NSF Certified for Sport®

Lab tested and certified for quality, purity and patient safety.



BENEFITS:

- **Faster Recovery**
- **Improve Patient Care** •
- **Increase Muscle Strength**
- Improve Lean Body Mass
- **Support Wound Héaling**
- **Reduce Infection**

Ljungqvist JAMA Surgery. 2017 Henriksen Acta Anaesthesiol Scand. 2003 Noblett Colorectal Dis. 2006 Yuill Clin Nutr. 2005 Ackerman 2018





Ingredients: Silicon Dioxide. Natural Flavors. Citric Acid. Stevia Leaf Extract.

- **REDUCES:**
- **Insulin Resistance**
- Thirst & Hunger
- Nausea & Vomiting
- Length of Stay
- Anxiety & Stress Protein Loss

Nygren Clin Nutr. 1998 Brady Cochrane Database System Rev. 2003 Hausel Anesth & Anal 2001 Hausel Br J Surg 2005 ERAS Compliance Group Ann Surg 2015 Svanfeldt Br J Surg 2007

$\mathbf{2}\mathbf{x}$ the night before surgery

X 2-3hrs prior to surgery

EVIDENCE-BASED RESEARCH RECOMMENDS CARBOHYDRATE LOADING AS AN ALTERNATIVE TO PREOPERATIVE FASTING

xrscience.org

Avoid Fasting

Advances in recent research indicate that preop fasting can leave patients ill-prepared to cope with the stress of surgery, which increases their vulnerability to surgical infection, extended hospital stay, and muscle atrophy.

Reduce Metabolic Stress

Consuming complex carbohydrates prior to surgery can help maintain the body's fed state and mitigate the surgery-induced stress response (insulin resistance).



Energy Endurance Support

Providing sustained energy utilizing maltodextrin shifts the body to a metabolically nourished state. Similar to an athlete preparing for a competitive event, the goal of carbohydrate loading is to be optimally fueled to face the stress of surgery.



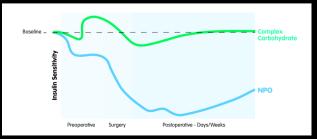
Diabetic Recommendations

Carbohydrate loading has been shown to be safe in well-controlled diabetics, without increased risk of aspiration or complications. Type 1 diabetics and uncontrolled diabetics are generally not recommended for carbohydrate loading.

GLYCEMIC CONTROL

Carbohydrate loading has been found to decrease insulin resistance, decrease nausea and vomiting, optimize glucose control and support improved wound healing postoperatively.

The Enhanced Recovery After Surgery (ERAS) protocol prioritizes patient outcomes and recovery through minimizing perioperative stress, incorporating carbohydrate loading as a key component of this approach.



Ljungqvist Rhoads JPEN 2012